

IN THE CLAIMS:

Please insert this listing of claims for the claims already on file:

Claim 1 (Canceled)

Claim 2 (Canceled)

Claim 3 (Canceled)

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Claim 4: (Currently Amended) An arrangement for interferometric radar measurement comprising:

a transmitter disposed on a turnstile of a ROSAR system of a helicopter radar;

at least two assigned coherent receiving antennas having receiving channels disposed on a turnstile of a ROSAR system of a helicopter radar; and

an additional transmitting/receiving antenna
sharply that has a narrow beam and ^{is} focused downward in elevation covering a lower range of a sight angle.

Claim 5. (Original) The arrangement for interferometric radar measurement according to claim 4, wherein said transmitter

and said at least two assigned coherent receiving antennas are arranged at an end of said turnstile.

Claim 6. (Original) The arrangement for interferometric radar measurement according to claim 4, wherein said receiving antennas are positioned vertically over each other in a normal position of a helicopter.

Claim 7. (Currently Amended) A process for interferometric radar measurement comprising the steps of:

assigning two coherent receiving antennas having receiving channels to a transmitter;

calculating a path length difference of two distances to a measured receiving point from a wave length of a transmitted radar signal and of a measured phase difference of a reception echo of both coherent receiving channels;

assigning said two coherent receiving antennas to a transmitter of a ROSAR system;

arranging said two coherent receiving antennas and said transmitter on a rotating turnstile of a radar; and

evaluating signals of an additional
transmitting/receiving antenna that has a narrow beam and is is
~~sharply focused transmitting/receiving antenna~~ for determination
of said phase difference of said reception echo of both coherent
receiving channels;

wherein a helicopter operating according to the ROSAR
principle is used for the interferometric radar measurement.

8. (Original) The method according to claim 7, further
comprising a step of calculating coordinates of a respective
receiving point using a sight angle for representing image points
on an integrated graphic display screen in the ROSAR system.

9. (Currently Amended) The method according to claim 7,
wherein said antenna and a center of an image on said graphic
display screen are in a fixed relationship.